



Vix



Rhys



Josh



Demi



Clare



Andrew

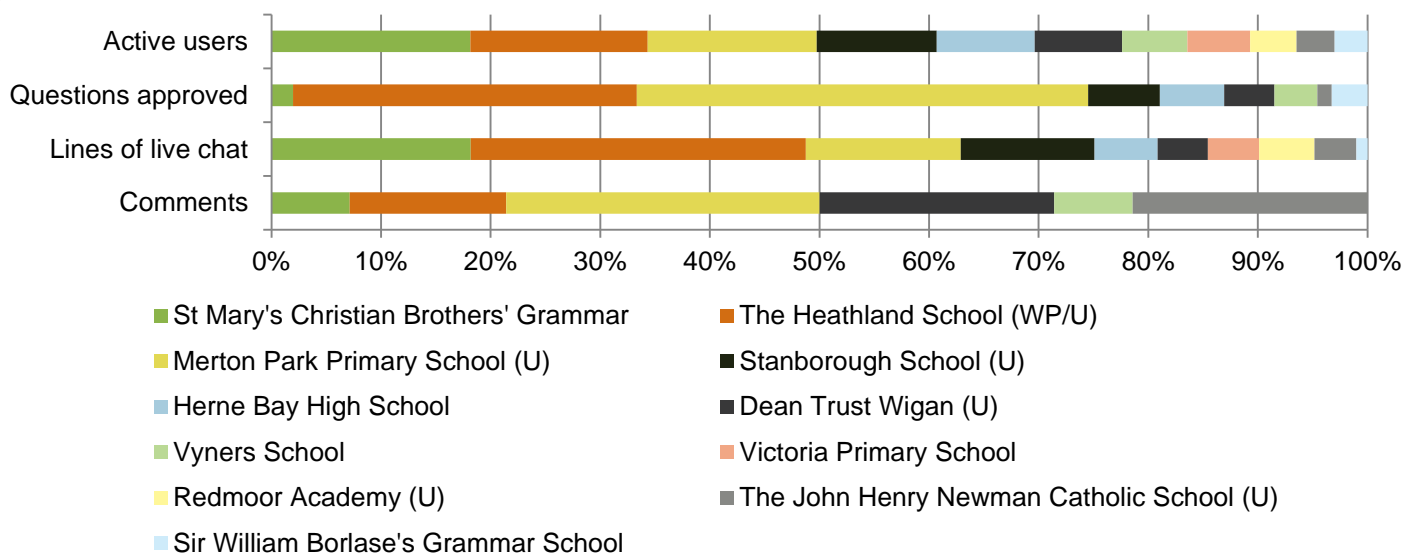
March 2018

The Millimetre Zone was a general engineering zone funded by the Royal Academy of Engineering, with six engineers working in a variety of areas.

- Vix designs water and sewage treatment centres
- Rhys is responsible for safety and technical management of the NATO submarine rescue system
- Josh designs and makes instruments used by scientists for precision measurements
- Demi, the winner in this zone, helps her company to win more work in the rail sector
- Clare looks after the blades of wind turbines
- Andrew is a project manager for Yorkshire Water

Nearly two thirds of questions in this zone were about careers and education with students showing a real interest in the different career paths the engineers had taken, such as why Demi had chosen to give up being an athlete to become an engineer.

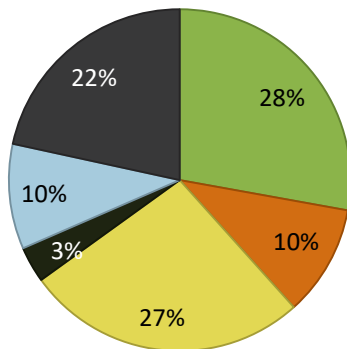
School data at a glance



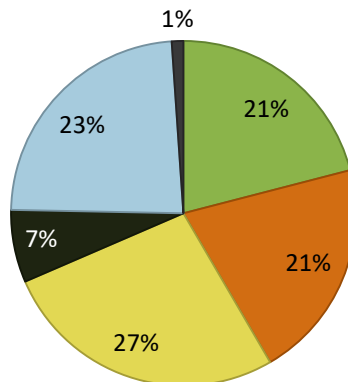
We want to increase the participation of under-represented groups going into STEM careers. Find out what we mean by our under-served (U) and WP schools (WP), and how you can support us in working with more of these at about.imascientist.org.uk/under-served-and-wp/

Engineer activity

Answers



Lines of chat



ENGINEER	PROFILE VIEWS	POSITION
Demi Ademuyewo	683	Winner
Rhys Edwards	611	2nd
Victoria Herbert	758	3rd
Joshua Schofield	543	4th
Clare Causier	485	5th
Andrew Constantine	414	6th

Key figures from the Millimetre Zone and the averages of the March zones

PAGE VIEWS	MILLIMETRE ZONE	MAR '18 ZONES AVERAGE
Total zone	17,061	14,904
ASK page	1,441	1,061
CHAT page	1,885	1,692
VOTE page	1,534	1,324

	MILLIMETRE ZONE	MAR '18 ZONES AVERAGE	IAE 2012-18 AVERAGE
Schools	15	13	11
Students logged in	455	458	410
% of students active in ASK, CHAT or VOTE	88%	88%	85%
Questions asked	488	597	611
Questions approved	153	181	225
Answers given	352	300	448
Comments	30	42	45
Votes	347	322	306
Live chats	21	20	18
Lines of live chat	7,359	7,154	5,575
Average lines per live chat	350	367	319

Popular topics

Students in this zone were very interested in working as an engineer, and wanted to know about the day to day aspects of everybody's jobs. They wanted to know how much time they spent on site or in an office, where their favourite place to work is, and whether they worked on their own or in a team. There was interest in different routes into engineering such as apprenticeships and degrees, as well as what it is like to be a woman in the industry.

Students also asked for specifics on the engineers' current projects, such as asking Clare about how wind turbines are made and Rhys about the different submarines he has worked with and what they are used for.

There was also interest in how engineering can help us in the future with large issues such as global warming or how engineering can generally help local communities.

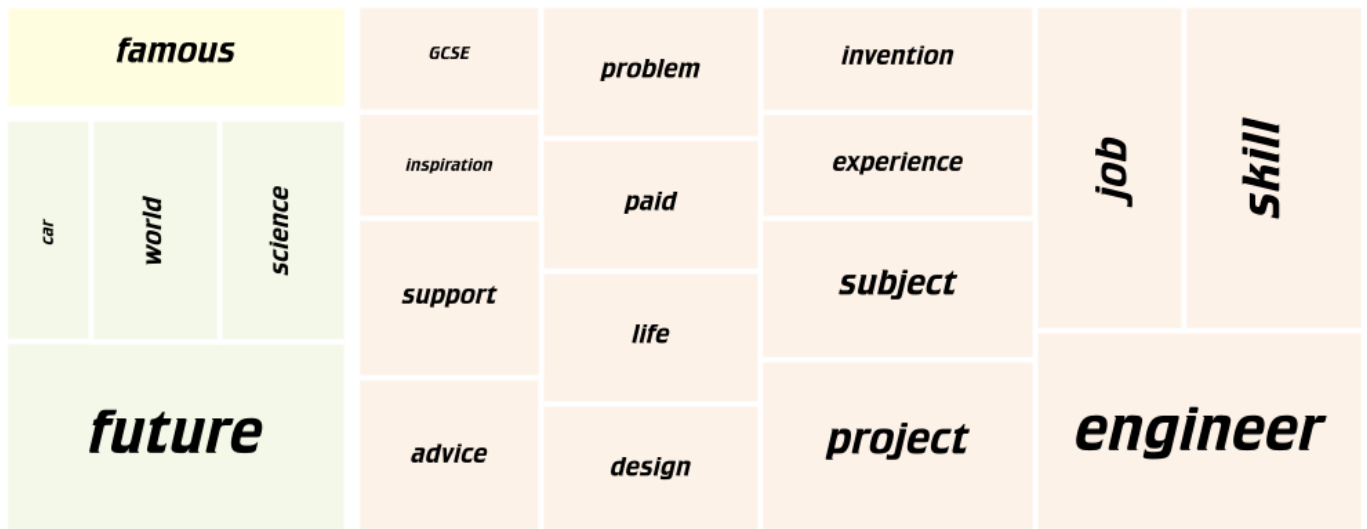


Keywords from live chats in the zone. size of the word represents its popularity



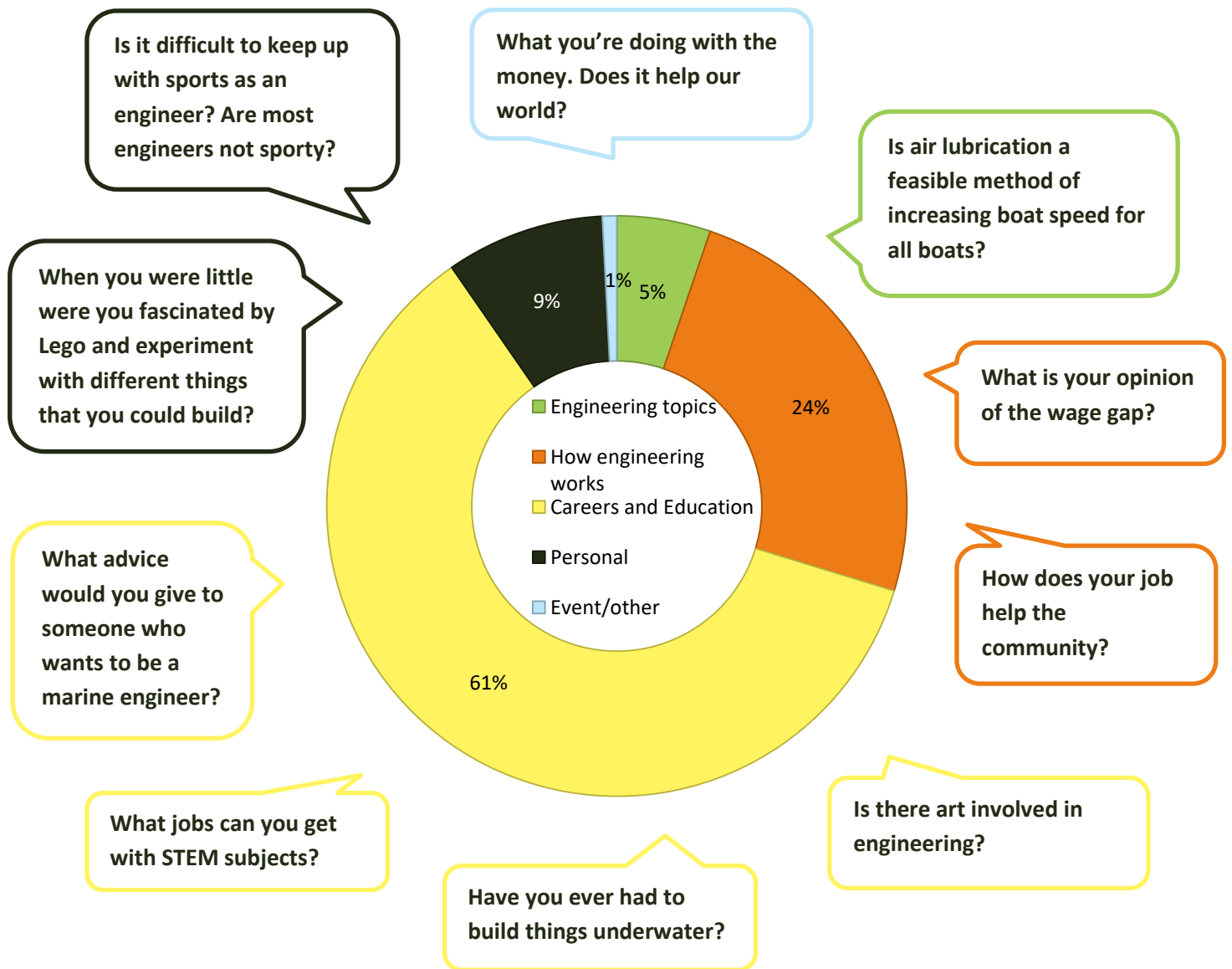
Top Keywords of questions approved in the Zone

Area represents frequency of use



Being an engineer Engineering Other

Question themes and example questions in the Zone



Find out about how we've coded the questions at about.imascientist.org.uk/2017/student-question-coding

Examples of good engagement

Within the chats students were interested in the projects the engineers worked on, often asking follow up questions.

"@Clare what is your best project?" – Student

"Bringing a new wind turbine into the UK was pretty exciting - the biggest offshore wind farms ever built" – Clare, engineer

"how would you make a windturbine?" – Student

"Wind turbines are made from a lot of steel and lots of small components - these are all assembled into bigger packages until you have some tower sections, the blades and the box on top which does the main conversions to electricity." – Clare, engineer

"About how long does it take to make a wind turbine?" – Student

"Once all the planning has been done you can put a wind turbine together in the sea in 24 hours - but it can take 10 years from someone first thinking 'this is a good place for a wind power plant' to actually generating electricity" – Clare, engineer

14 students logged into the zone for an evening chat with the engineers, and some brought their families online too, increasing parental engagement with the activities students are doing in school.

"From my dad, what is the most challenging thing about your job?" – Student

"Knowing that we might get called out in the next five minutes to respond to a sunken submarine. It almost happened before Christmas in Argentina." – Rhys, engineer

"Does it happen often?" – Student

"No, but we are ready to go if asked!" – Rhys, engineer

"From my mum, where is your favourite place to do your work?" – Student

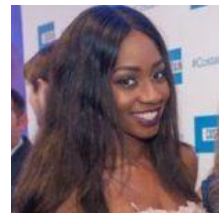
"I'm fortunate - I work in a bright relaxed office where there's space to informally chat about ideas as well as quieter places for when you need to concentrate." – Clare, engineer

"It depends what I am trying to get done. At the beginning of projects I prefer to be in the office with the other engineers working on the project so we can share ideas and build up a design plan" – Vix, engineer

Scientist winner: Demi Ademuyewo

Demi's plans for the prize money: "AFBE-UK's (Association for BME Engineers) Making Engineering Hot Mentoring Programme will raise the aspirations of young people by helping them to consider opportunities within their communities and the wider world. I would use the prize money to raise more awareness of the Making Engineering Hot Programme and also try and cover as much costs the programme incurs from offering this opportunity to these kids!"

Read Demi's [thank you message](#).



Student winner: Amreen123

For great engagement during the event, this student will receive a gift voucher and a certificate.

Feedback

We're still collecting feedback from teachers, students and engineers but here are a few of the comments made during the event...

"I really enjoyed the chats and how enthusiastic all the students were! They were frantic but fun!" – Engineer

"It was a great experience for the students and they were really engaged in the sessions." – Teacher